



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/964,658  | 09/28/2001  | Hiroki Yoshida       | 35.C15836           | 3504             |
| 5514  | 7590        | 09/10/2004           | EXAMINER            |                  |
| FITZPATRICK CELLA HARPER & SCINTO<br>30 ROCKEFELLER PLAZA<br>NEW YORK, NY 10112 |             |                      | PHAM, HAI CHI       |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2861                |                  |

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/964,658

**Applicant(s)**

YOSHIDA, HIROKI

**Examiner**

Hai C Pham

**Art Unit**

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on RCE & Amendment filed 03/04/04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20,24 and 32-119 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20,24 and 32-109 is/are allowed.
- 6) ☒ Claim(s) 110-119 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Request for Continued Examination***

1. The request filed on March 4, 2004 for a Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/964,658 is acceptable and a RCE has been established. An action on the RCE follows.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 110-119 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

#### Claims 110, 114, 115, 118 and 119:

- Each of the claims 110, 114, 115, 118 and 119 recites the following limitation  
“said setting means is a light source means” (emphasis added), which appears to be ambiguous and/or misleading in that:
  - the setting means is defined as a means for setting an actual sub-scanning interval error between the scanning lines in a sub-scanning line direction due to a polarization angle difference between the light beams emitted from the plurality of light emitting portions to be no more than 1/5 of a desired scanning line interval” as set forth in the respective parent

Art Unit: 2861

claims 1, 38, 54, 82, 95, and based on the disclosure, the setting means mainly reduces the polarization angle difference between the light beams emitted from the plurality of light emitting portions by using different setups or configurations. Since each of the plural the light beams emitted by the respective light emitting portion of the light source means has its own polarization angle, which differs from each other, it is not known how the light source means would reduce such polarization angle difference by itself;

- during a telephone interview, Applicant's Representative, Attorney Frank Cire, indicates that the third embodiment in the present disclosure as shown in Figs. 4 and 5 is the closest configuration of the scanning optical apparatus that supports the abovementioned claimed limitation, wherein the polarization angles of the light beams are adjusted by rotating the light emitting portions about the principal axis of the scanning lenses. In this case, the configuration would need a separate mechanical adjusting device for rotating the light emitting portions. Therefore, the claimed setting means cannot be the light source itself. The wording of the claimed limitation is thus misleading.

Claim 111:

- The following limitation "said setting means is a light source means" (emphasis added) appears to be ambiguous and/or misleading in that the parent claim 24 defines the setting means as comprising an "adjustment means capable of independently adjusting polarization angles of light beams emitted from the

plurality of light emitting portions” and thus indicates that the setting means cannot be the light source means itself.

Claim 112:

- The following limitation “said setting means is a light source means” (emphasis added) appears to be ambiguous and/or misleading in that the parent claim 32 defines the setting means as comprising “a scanning optical element made of a resin, which is shift-decentered perpendicularly to a sub-scanning direction” for correcting the polarization angle difference between the light beams emitted from the plurality of light emitting portions, and thus negate the notion that the setting means is constituted by the light source means itself. Moreover, the claimed limitation would combine different embodiments into one claim.

Claim 113:

- The following limitation “said setting means is a light source means” (emphasis added) appears to be ambiguous and/or misleading in that the parent claim 35 defines the setting means as comprising “polarized light limiting means inserted into an optical path between the light source means and said scanning optical element made of the resin” for correcting the polarization angle difference between the light beams emitted from the plurality of light emitting portions, and thus negate the notion that the setting means is the light source means itself. Again the claimed limitation would combine different embodiments into one claim.

Claim 116:

- The following limitation “said setting means is a light source means” (emphasis added) appears to be ambiguous and/or misleading in that the parent claim 74 defines the setting means as comprising “a scanning optical element made of a resin, which is rotary-decentered about the main scanning direction” for correcting the polarization angle difference between the light beams emitted from the plurality of light emitting portions, and thus negate the notion that the setting means is constituted by the light source means itself. Moreover, the claimed limitation would combine different embodiments into one claim.

Claim 117:

- The following limitation “said setting means is a light source means” (emphasis added) appears to be ambiguous and/or misleading in that the parent claim 75 defines the setting means as comprising “a scanning optical element made of a resin, which is shift-decentered perpendicularly to a sub-scanning direction and rotary-decentered about the main scanning direction” for correcting the polarization angle difference between the light beams emitted from the plurality of light emitting portions and thus negate the notion that the setting means is constituted by the light source means itself. Moreover, the claimed limitation would combine different embodiments into one claim.

Appropriate correction is required.

***Allowable Subject Matter***

4. Claims 1-20, 24, 32-109 are allowed.

Art Unit: 2861

5. Claims 110-119 would be allowable if rewritten to overcome the rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Contact information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai C Pham whose telephone number is (571) 272-2260. The examiner can normally be reached on M-F 8:30AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**HAI PHAM**  
**PRIMARY EXAMINER**

September 1<sup>st</sup>, 2004